

in the inner tube 12, an resilient spring 14 in the inner tube 12 and below the refill 13, and a transparent light guide tube 15 in the inner tube 12 and being passed by an upper section of the refill 13.

The feature of the present invention will be described here. A top of the light guide tube 15 resists against a lower end of the light emitting device 22. A surface of the inner tube 12 is coated with film 12a having advertising patterns or texts thereon. The film 12a includes two parts with one part being a transparent surface and another part being an opaque surface for printing with pattern or texts.

5 The transparent surface has no pattern or text thereon. The film is formed by screen printing, coating, sinking for dying, adhering, painting, etc. The film 12a may be formed by convex or concave patterns. It is preferred that the film 12a is installed at an upper disclosing section 112 above the outer tube holding section 111 so

10 that the film 12a is not shielded by the fingers holding the pen. The hold portion 111 is a section for being held by the three fingers holding the pen (including a thumb, a forefinger, and a middle finger). When the inner tube 12 is placed into the outer tube 11, the lower section 121 is exactly at the same level as the holding section 111.

15 Therefore, the film 12a will not be affected by the holding of the pen.

Referring to Fig. 4, when the lighting emitting body 25 lights up, light emits downwards through the light guide tube 15, and then emits out through the inner tube 12 so that patterns or texts on the film 12a are displayed clearly. Thereby, the light is reflected through the

transparent outer tube 11 and incident to the paper for writing. When the patterns or texts are concave or convex patterns or texts, the patterns or texts will have vivid images by the impinging of the light from the inner tube 12.

5 Referring to Figs. 1 and 2, a hollowed pattern 21a is formed by hollowing the wall at a lower end of the outer tube 21 of the upper pen tube 20. The hollow pattern 21a is formed by punching or molding, etc. and may be a trademark. The position of the hollowed pattern 21a is aside the light emitting device 22. When the light 10 emitting device 22 lights up, the light passes through the hollowed pattern 21a. It is preferable that the light emitting device emits colored lights.

Above mentioned outer tube 11, inner tube 12 and lower pen tube 20 are transparent. The light guide tube 15 has a function of 15 stabilizing refill 13. A top of a transparent upper plastic solid body of the light guide tube 15 is in contact with the light emitting body 25. Thereby, light can be guided by the light guide tube 15 so that light is transferred from the upper end to the lower end. The light guide tube 15 can be integrally formed with the refill 13. Moreover, in the 20 present invention, the light guide tube 15 can be neglected, however this will induce a poor light guide effect. The refill 13 must be formed with two protrusions (not shown) at a predetermined position of the outer wall thereof for stopping the resilient spring 14.

Referring to Figs. 3 and 4, the structure of the upper pen tube 20

transparent inner tube 12 enclosing the light guide tube 15 and the transparent outer tube 11 enclosing the inner tube 12 causes the light emits out from the light guide tube 15 through the transparent inner tube 12 and outer tube 11 so that the lower section of the advertising 5 light emitting pen 30 can light up. Since the film 12a is on the surface of the inner tube 12, when light emits from the inner tube 12, the patterns or texts on the film 12a appear clearly so as to achieve the effect of advertisement. Moreover, the film 12a is between the inner tube 12 and the outer tube 11, it is not worn or vague by the 10 holding of the pen.

## SECOND EMBODIMENT

Referring to Fig. 4, a cross section view about the advertising light emitting pen of the present invention is illustrated. The difference of this embodiment to the above embodiment is that the 15 upper pen tube 40 is a rotatable pen tube which is known in the prior art and thus the details will not be described here. The structure of the lower pen tube 10, light emitting device 22 and film 43 on the outer tube 41 are the same as above mentioned embodiment. When the user rotates the outer tube 41 of the upper pen tube 40, the 20 actuation device 43 can be driven to rise or descend so as to emit light and rise or descend the refill 13. For example, when the outer tube 41 rotates clockwise, the light emitting device 22 will be driven to emit light and the refill 13 protrudes from the outer tube 11. Moreover, when the upper pen tube 40 rotates counterclockwise, the

light emitting device 22 will not light up and the refill 13 embeds into the outer tube 11.

### THIRD EMBODIMENT

Referring to Fig. 6, a cross section view of the advertising light emitting pen in the third embodiment of the present invention is illustrated. The difference of this embodiment to the above embodiment is that the upper pen tube 60 has a rotatable rod 64. In this embodiment, the lower pen tube 10, light emitting device 22, and the hollowed pattern 63 in the outer tube 61 is the same as those in the first embodiment. When the user rotates the rotatable rod 64, the actuation device 62 in the upper pen tube 60 will rise or descend so as to emit light or protrude the refill 13. For example, when the rod 64 is rotated upwards, the light emitting device 22 lights up and the bottom of the refill 13 protrudes from the outer tube. Moreover, when the rod 64 is rotated downwards (as shown by the dashed line), the light emitting device 22 dose not light up and the refill 13 embeds into the outer tube 11.

Advantages of the present invention will be described here. The lower section of the advertising light emitting pen has a preferred advertise effect. The patterns or texts are not affected by holding of the pen. The lower section of the advertising light emitting pen can light up so as to appear the patterns or texts on the film and moreover, the light incidents into the paper so as to assist the writing of the advertising light emitting pen. Moreover, the hollowed pattern can